

streak purplish cobalt-blue. Under parts rich orange-saffron, marked with green on the sides of the belly. Carpal joint edged with cobalt-blue. Wings and tail light hair-brown underneath. Bill deep brownish-black. Irides deep brown. Legs and toes leaden grey.

Length about 7 inches ; wing 3·7 ; tail 3, of 12 feathers.

Female. General colour green, greyish on the head, and tinged with yellow on the under parts. Her moustache-feathers are tipped with purplish-cobalt. Her tail is green, with brown stems to the feathers, and the inner or concealed halves of her wing-feathers are hair-brown.

Wing 3·5 ; tail 2·8.

On returning to Tai-ping-sze (Central Hainan) from the inner mountains, I was watching for birds by the side of a cottage ensconced in a wood, when suddenly I heard a long loud chatter which was quite new to me. I turned in the direction of the noise, and saw what seemed to be a squirrel. On staring more fixedly I made it out to be a bird hanging head downwards on a creeping plant that entwined a tree, and reaching after insects on its flowers. I trembled with excitement when I picked up a fine male of this very lovely species. I did not see it again till we reached Yu-lin-kan (S. Hainan). Here, among the jungles, while we were refreshing ourselves by a stream, to which our savage guide (before mentioned) had led us, three or four of these birds appeared in the trees overhead, uttering loud mellow notes. I scrambled about through the tangles, and succeeded in getting a pair.

[To be continued.]

XVIII. On *Existing Remains of the Gare-fowl* (*Alca impennis*). --

By ALFRED NEWTON.

IN consequence of a notice in 'The Ibis' (1868, p. 342) of the list of remains of *Alca impennis*, published by M. Victor Fatio in the 'Bulletin de la Société Ornithologique Suisse' (ii. pt. 1, pp. 80-85), that gentleman has asked me to furnish him with such further information as I can supply on the subject.

Acceding to his request with the greatest pleasure, I think such emendations of that list as I am in a position to make, together with a general summary of their results, may not be void of interest in this country also; and I therefore publish here, in the briefest manner possible, the particulars of which I am possessed, M. Fatio having kindly favoured me with the additional information he has obtained in the meantime.

Easy as the task may seem, it is in fact very difficult (as has been already stated in the notice to which I have referred) to compile a perfect list of the skins, bones, and eggs of this bird which exist in collections. For more than ten years, as many of my friends know, it has been my object to do this, and, ably assisted of late by Mr. G. D. Rowley, I have accumulated a vast mass of materials in my endeavours to trace the history of each specimen. I am still far from having obtained this desirable end, owing to many obstacles which present themselves. Upon these, however, I will not dwell; their existence is not very creditable to the candour of ornithologists, though the number of persons to whom they are due is small; and it is enough to say that I hope they may in time be overcome, so as to enable Mr. Rowley and myself to append to our contemplated 'Monograph' a really good historical catalogue.

Setting aside for the present all consideration of those specimens whose existence, though indicated to us, must still be regarded as extremely doubtful, the following remarks will, I think, fairly bring M. Fatio's list to the level of the information possessed by Mr. Rowley and myself. At the same time I must not be understood as pledging myself to a belief in the existence of all those that I have left unchallenged. To facilitate comparison, I follow M. Fatio's arrangement; and in citing authority for my statements I intentionally limit myself to as much as is sufficient for my present purpose. It is in nearly every case that of an eye-witness.

SKINS.

GERMANY.—*Add*:—

1. Brunswick. University Museum. Seen by myself.
1. Grätz. Johanneum. J. W. Clark, *in litt.* 15 Oct. 1868.
1. Strasburg. Town Museum. Seen by myself.

1. Stuttgart. Museum. Dr. Krauss *in litt.* 7 Nov. 1867.

Deduct:—

2. Flensburg. Of *three* formerly in Mechlenburg's collection *two* are now in England (Mr. Hancock's and Mr. Champley's collections). The remaining *one* is still, I believe, in the Museum of Flensburg.
1. Mühlstadt. This seems to be included by mistake, as Herr Pässler makes no mention of it (J. f. O. 1860, pp. 58–60).

FRANCE.—*Add:—*

1. Amiens. Town Museum. Seen by myself.
1. Lille. Town Museum. L. O. Gaillard, *Ibis*, 1862, p. 302.
- ? 1. Metz. Town Museum? Prof. Reinhardt has kindly informed me that in 1842 Malherbe received a specimen from the Royal Museum of Copenhagen. I believe that Malherbe's collection is now at Metz, but I am not sure of the fact.
1. Vitry. The Count de Riocour. *Ipsé in litt. ad V. Fatio*, 9 Apr. 1869.

Note. Delamotte's specimen is now in the Abbeville Museum, where I have seen it.

ITALY.—*Add:—*

1. Pisa. Town Museum. E. P. Wright, *ex ore*, Sept. 1863; E. C. Taylor, *in litt.* 4 Sept. 1866.
1. Veneria Reale. Private collection of the King, obtained in 1867 from that of the late Pastor Brehm. G. Hartlaub *in litt.* 15 May, 1867; P. L. Sclater *in litt.* 27–29 Jan. 1869.

NORWAY.—*Deduct:—*

2. Christiania. University Museum. Inserted by mistake, the passage in Prof. Steenstrup's admirable essay (*Naturh. Foren. Vidensk. Meddelelser*, 1855, p. 78) referring to the two of which physiological preparations may be seen in the Copenhagen Museum (*cf. Ibis*, 1861, p. 392). The skins are elsewhere included.

Note. Herr Aall's specimen is at his house, at Næs, where I have seen it, and not at Christiania.

SWEDEN.—*Add:—*

1. Lund. University Museum. J. Wolley *in MS.*
1. Stockholm. Royal Museum. Seen by myself.

UNITED KINGDOM.—*Add:—*

1. Mr. Champley. From Mechlenburg's collection (*ut supra*).
1. Mr. Crichton. } Seen by myself.
1. Mr. Foljambe. }
1. The late Mr. Hoy. A. D. Bartlett *ex ore*; C. R. Bree *in litt.* 2 Oct. 1867.
1. The late Mr. Lombe. H. Stevenson *ex ore*.
1. Mr. Naylor. B. Leadbeater *ex ore*.

1. Mr. Roake .. }
2*. Mr. Rowley } Seen by myself.

Deduct :—

1. British Museum, "Northern Zoological Gallery." As is probably well known to all ornithologists in this country, the British Museum only contains two skins; and Herr Preyer's statement (J. f. O. 1862, p. 77), though clearly to that effect, has been accidentally misunderstood. (*Cf.* Nat. Hist. Rev. 1865, p. 473.)

BELGIUM.—*Add* :—

1. Brussels. Town Museum. . . . }
1. Baron de Selys-Longchamps. . } Seen by myself.

PORTUGAL.—*Add* :—

1. Lisbon. Royal Museum. A. C. Smith, *Ibis*, 1868, p. 457.

UNITED STATES.—*Add* :—

1. Washington. Smithsonian Institution, from Herr C. E. Götz, of Dresden. G. A. Frank, *in litt.* ad G. D. Rowley; S. F. Baird *in litt.*
1. Philadelphia. Mus. Acad. N. S. Seen by myself.
1. Poughkeepsie. Vassar College, from the late Mr. Giraud's collection, formerly Audubon's (*cf.* *Ibis*, 1861, p. 398, note). E. Coues, *Proc. Ac. N. S. Philad.* Jan. 1868

Summary.

Germany 20	Norway. 1	Belgium 2
Denmark 2	Sweden. 2	Portugal 1
France . . 7 (or 8?)	United Kingdom 22	United States. . 3
Holland. 2	Russia 1	
Italy 5	Switzerland . . 3	71 (or 72?)

BONES.

I shall here attempt a complete list, instead of merely adding to or correcting that of M. Fatio.

Skeletons.

GERMANY.

1. "Breslau (in part)." R. Champley, *Ann. & Mag. N. H.* 3rd ser. xiv. p. 236.

FRANCE.

1. Paris. Muséum du Jardin des Plantes (very perfect). Seen by myself.

* One of these formerly belonged to Count von Westerhold, and thus is, doubtless, the same as that mentioned by Dr. Altum (*J. f. O.* 1863, p. 115, note).

ITALY.

1. "Florence (in part)." R. Champley *ut supra*.

UNITED KINGDOM.

1. London. British Museum (very perfect) }
 1. " Roy. Coll. of Surgeons (very perfect) } Seen by myself.
 1. Coll. A. & E. N. Wants the limbs and ribs of the left side, and metacarpals and phalanges of the right. In other respects perfect. The specimen described by Prof. Owen (Trans. Zool. Soc. v. pp. 317-335, pls. li., lii.).
 1. ? W. Waterman *in litt*.

UNITED STATES.

2. Boston. Harvard Univ. Mus. Bishop of Newfoundland *in litt*.

Detached Bones.

DENMARK.

- Copenhagen. Royal Museum. Bones of 3 individuals found in Danish kitchen-middens. Seen by myself.
 —. —. Bones of several (perhaps 5 or 6) sent from Funk Island by Stuvitz. Seen by myself.
 —. —. Remains of 2 individuals killed in Iceland in 1844, preserved as physiological preparations. J. Steenstrup, *op. cit*.

NORWAY.

- Christiania. University Museum. Bones of several individuals (perhaps 8 or 10) sent from Funk Island by Stuvitz. Seen by myself.

UNITED KINGDOM.

- London. British Museum. Bones of 2 individuals found in kitchen-middens in Caithness. Nat. Hist. Rev. 1865, p. 470.
 —. Royal Coll. of Surgeons. 1 cranium. Seen by myself.
 Coll. A. & E. N. Bones of at least 8 individuals, found in kitchen-middens in Iceland, by the late Mr. Wolley and myself (Ibis, 1861, pp. 394-396).
 Newcastle on Tyne. Museum. } Bones extracted from skins by Mr.
 —. Mr. Hancock } Hancock. Seen by myself.

UNITED STATES.

- ? Bones of at least 7 individuals from kitchen-middens in Maine and Massachusetts. J. Wyman, Am. Nat. i. pp. 374, 578.

*Summary.**(Skeletons.)*

Germany 1		Italy 1		United States . . 2
France 1		United Kingdom 4		—
				9

(Detached Bones.)

Denmark 10 (or 11 ?) individuals.		United States . . 7 individuals.
Norway 8 (or 10 ?)		—
United Kingdom 13		38 (or 41 ?)

Eggs.

The enumeration of the eggs is attended with the greatest difficulty of all. It is very possible that at least *five* more exist than I have been able to ascertain beyond doubt. Every precaution has been now taken not to count the same specimen twice, which is very necessary, since so many have of late changed owners.

GERMANY.—*Deduct* :—

1. Flensburg. Now in Mr. Champley's collection (*ut supra*).
1. Thienemann's collection, already counted by M. Fatio as in the Dresden Museum, where I have seen it.

FRANCE.—*Add* :—

1. Angers. The Count de Baracé, as he himself has kindly informed Mr. Rowley, possesses *three*, being *one* more than mentioned by M. Fatio.

UNITED KINGDOM.—*Add* :—

2. Edinburgh Museum. H. W. Feilden, Ibis, 1869, p. 358.
1. Lady Cust. W. Yarrell, *ex ore*.
1. Mr. Rowley. Seen by myself.
1. Mrs. Wise. J. Wolley, in *MS*.

Deduct :—

1. "Mr. Troughton," being *one* of the *three* in Lord Garvagh's collection already counted by M. Fatio.

Note. *Four* of the *seven* enumerated by M. Fatio as belonging to the Royal College of Surgeons have passed into the collections of Messrs. Braikenridge, Burney, Crichton, and Rowley. That of the late Mr. Wilmot is, I believe, in the possession of Mr. G. L. Russell.

UNITED STATES.—*Add* :—

2. Philadelphia. Mus. Acad. N. S. Seen by myself.

Summary.

Germany.....	8	France.....	7	Switzerland ..	2
Belgium	2	Holland	2	United States..	2
Denmark.....	1	United Kingdom	41		—
					65

Therefore the existence is recorded of 71 or 72 skins, 9 skeletons, detached bones of 38 or 41 different birds, and 65 eggs.

Magdalene College, Cambridge,
21 March, 1870.

XIX.—*Notices of Recent Ornithological Publications.*

1. ENGLISH.

SINCE our last notice of 'Exotic Ornithology' * (Ibis, 1869, pp. 109, 110) five additional parts have been issued, and the work brought to a happy conclusion. The species figured herein are as follows :—

PART IX. December, 1868.

<i>Pyrgisoma cabanisi.</i>	<i>Accipiter bicolor.</i>
—— <i>kieneri.</i>	<i>Turdus gigas.</i>
<i>Oxyrhamphus frater.</i>	—— <i>albicollis.</i>
<i>Thyrorhina schomburgki.</i>	—— <i>leucomelas.</i>
<i>Chlorophonia calophrys.</i>	

PART X. April, 1869.

<i>Turdus crotopezus.</i>	<i>Bucco striolatus.</i>
—— <i>albiventris.</i>	<i>Porzana castaneiceps.</i>
—— <i>phæopygus.</i>	<i>Attagis chimborazensis.</i>
—— <i>gymnophthalmus.</i>	<i>Formicivora strigilata.</i>

PART XI. June 1869.

<i>Conurus hoffmanni.</i>	<i>Accipiter guttatus.</i>
<i>Rallus antarcticus.</i>	<i>Ampelion arcuatus.</i>
—— <i>semitlumbus.</i>	<i>Asturina nattereri.</i>
<i>Pitylus humeralis.</i>	—— <i>ruficauda.</i>

PART XII. August, 1869.

<i>Asturina pucherani.</i>	<i>Thripadectes flammulatus.</i>
—— <i>plagiata.</i>	<i>Icterus abeillæi.</i>
<i>Botaurus pinnatus.</i>	<i>Centropelma micropterum.</i>
<i>Tigrisoma fasciatum.</i>	<i>Centrites oreas.</i>

PART XIII. November 1st, 1869.

<i>Gallinago imperialis.</i>	<i>Querquedula puna.</i>
—— <i>nobilis.</i>	<i>Merganetta turneri.</i>

Without noticing in detail the many species here enumerated, we may mention that several of the subjects chosen serve to illustrate certain monographs recently elaborated by the authors in the Zoological 'Proceedings.' The Plate now given, represent-

* Exotic Ornithology. By PHILIP LUTLEY SCLATER, M.A. &c., and OSBERT SALVIN, M.A. &c. Parts ix.-xiii. London: Imp. 4to.

ing the two species of *Pyrgisoma*, together with Plate lxiv. illustrate the paper on this genus (P. Z. S. 1868, p. 324). The various Rails, too, have all been selected in special reference to the authors' admirable monograph on the American *Rallidæ* (P. Z. S. 1868, pp. 442-470). The most remarkable species among them is that to which the generic name *Thyrorhina* is given. It seems to stand alone in the *Rallidæ*, having the nasal openings operculated, and a median septum completely dividing the nostrils from one another. Then we have four *Asturinae* figured in illustration of another monograph (P. Z. S. 1869, p. 130). Several of these, as separated, appear to be very closely allied to one another; but the geographical distribution of the forms favours the authors' view. The *Turdidæ* figured, seven in number, though not affording attractive plates so far as colour is concerned, will be of considerable service in determining the South-American species, about which great confusion seems to have prevailed, if we may judge by the string of synonyms borne by some of the species.

We must not omit mentioning the monographic lists appended to several of the species figured, as they will prove to the student perhaps the most useful portion of the work. We now have:—a list of the species of *Attagis* accompanying the Plate of *A. chimborazensis*; a list, with concise diagnoses, of the three small Water-Rails allied to *Rallus virginianus*; and a complete list of the species comprised in the genus *Pitylus*, giving their synonymy, diagnoses, and distribution, together with a plate of *P. humeralis*, a species lately described by Mr. Lawrence (*cf.* Ibis, 1868, p. 114). The synonyms of the larger group of North- and South-American species of *Accipiter* are also collected together, and the species (seven in number) separated under three sectional headings. The genus *Ampelion*, with its four species, is treated in like manner. The two American species of *Botaurus* do not require a tabular list; and the letterpress answers every purpose in discriminating the interesting South-American bird from its Northern ally, while a synopsis of the genus *Tigrisoma* is added to the detailed account of the species figured.

For the singular Grebe represented on Plate xev. the new generic name of *Centropelma* is proposed. Its wings are so

minute in proportion to its body as probably to render it incapable of flight. This very interesting species, first described by Mr. Gould (P. Z. S. 1868, pp. 220, 221), seems to be restricted in its range to the highland lake of Titicaca, in Bolivia. Accompanying the plate on which *Gallinago imperialis* is figured, we find the general divisions into which the American Snipes (nine in number) are capable of separation; and with the account of the following species, *G. nobilis*, the full synonymy of the whole of these species is given, to which a few short notes on each are added. The two final plates of the work represent as many Ducks—one the little-known *Anas puna* of Tschudi, and the other *Merganetta turneri*, a newly described (P. Z. S. 25 Nov. 1869) species of this singular genus.

The present volume, as now completed, contains illustrations of South-American birds only; but we venture to express a hope that, if a further series of plates is contemplated, the subjects may be selected from other parts of the world, though doubtless the Neotropical avifauna could afford sufficient materials for several such volumes as the present.

We notice with pleasure that several of the continental museums have lent specimens to the authors, to furnish some of the subjects of the illustrations—which being thus made from original type-specimens, are of additional value.

Mr. Rodd has brought out a new edition of the pamphlet* we formerly mentioned (Ibis, 1868, p. 100), wherein appear not only the additional manuscript notes of which we then spoke, but also some other observations of no small interest—those in the “Appendix” especially—bringing the whole up to the present level of his information. Having so lately remarked upon the ornithology of Cornwall, we need not now enlarge upon that subject, particularly as Mr. Rodd’s publication, though one which cannot be neglected, still leaves much to be desired.

* ‘A List of British Birds, as a Guide to the Ornithology of Cornwall.’ &c. By EDWARD HEARLE RODD. Second edition. London and Penzance: 1869. 8vo, pp. 51.

The Natural-History Society of Glasgow is one not much known to southron ornithologists, nevertheless its members display a laudable amount of activity in the good cause, as the two parts of its "Proceedings"* already published bear witness. Though founded in 1851, it was well advanced "in its teens" before an account of its doings was given to the world; and when at last this was effected, it was thought expedient to begin with the session of 1859-60. This arrangement, we are told, excludes only one "important subject"—the occurrence of the North-American *Regulus calendula*, an example of which, said to have been shot on the shores of Loch Lomond, was laid before the Society in April 1858, a fact already recorded by Mr. Gould (P. Z. S. 1858, p. 290) and Dr. Bree (B. Eur. ii. p. 109). Probably the future of a Society will be none the less prosperous and productive for feeling its way slowly and cautiously at first; we trust that it is now become firmly rooted; and certainly its present efforts fully deserve encouragement. The most important article contained in these two parts is, indubitably, that on the birds of Ayrshire and Wigtownshire, a separately printed copy of which (with some additions) we noticed in our last number (*anteà*, p. 125); but a great many other communications well deserve the notice of British ornithologists. We have not space to enumerate them here; but there is less reason why we should; for we doubt not they will be all duly incorporated in the work on the Birds of the West of Scotland, which we shortly expect from the Society's indefatigable secretary, Mr. Robert Gray. We may, however, mention two notices, both due to Mr. W. C. Angus, of Aberdeen—one (p. 207) recording the occurrence in that shire of *Buarremon schistaceus* (Boissonneau), which must, we think, have escaped from confinement, and the other (pp. 209-211, pl. iii.) of *Zonotrichia albicollis* (Gmel.). This last, by Mr. Angus's courtesy, we have lately had the opportunity of exhibiting at a meeting of the Zoological Society of London, and it may very possibly have crossed the Atlantic on its own account.

* 'Proceedings of the Natural History Society of Glasgow,' vol. i. part i. 1868, pp. 228, vol. i. part ii. 1869, pp. 229-384.

Mr. Eyton has reprinted the osteological plates, thirteen in number, which were given years ago in his 'Monograph of the *Anatide*;' to these five new ones, representing the skeletons of *Cereopsis novæ-hollandiæ*, *Dendrocygna arcuata*, *Biziura lobata* (♂ and ♀), and *Erismatura australis*, are added, and the whole published as a 'Supplement' to his great work on the osteology of birds*, of which we have before announced the completion (Ibis, 1868, pp. 98, 99).

Mr. A. C. Smith has done well in adding to his pleasant little book on Portugal† a chapter containing a reprint of his paper on the birds of that country, which appeared in this Journal (Ibis, 1868, pp. 428-460). He has further done well in incorporating therewith a translation of the observations on, and additions to, the same, made by Prof. Barboza du Bocage, and lately mentioned by us (*suprà*, p. 134), so that the whole forms a useful epitome of what has hitherto been recorded with respect to Portuguese ornithology. Mr. J. H. Gurney, however, informs us that he can add yet one other species to the list—to wit, *Buteo desertorum*, of which he lately saw in the Museum at Lille two specimens from Portugal, where its occurrence is a matter of probability; for we believe that Mr. Howard Saunders has obtained it in Spain.

2. FRENCH.

We have already (*anteà*, p. 122) alluded to the ingenious experiments on the flight of birds by Prof. Marey of the Collège de France, a full account of which, with the results at which he arrived, is printed in the 'Revue des Cours Scientifiques' for 1869 (Nos. 37, 38, 41, and 44); and it now gives us much pleasure to give a very brief abstract of his investigations. The chief apparatus for showing the real character of the motions of the wing consists of two air-tight basins (*cuvettes*), with tops of

* Supplement to Osteologia Avium; or a Sketch of the Osteology of Birds. By T. C. EYTON, Esq., F.G.S., F.Z.S. Wellington, Salop: 1869. 4to, 18 pls.

† Narrative of a Spring Tour in Portugal. By Rev. ALFRED CHARLES SMITH, M.A. London: 1867. 8vo, pp. 220.

india-rubber like little drum-heads, and connected by an air-tight tube of the same material, so that, the top of one being raised or depressed, the top of the other will be moved almost instantly in the reverse manner. On the top of one rests the short arm of a lever, the long arm of which carries a point just touching a moving strip of smoked paper or glass so as to record thereon the movements generated through the tube, while the top of the other basin is attached to the bird, the subjects of the experiments being Pigeons, Wild Ducks, Buzzards, and Harriers, which were induced to fly from one end of a long room to the other. In this manner one "drum-head," being pressed against the bird's breast, was made to record the contractions of the pectoral muscles; or two "drum-heads," connected by a rod, fixed to the wing registered its actual motion relatively to the bird; while, again, by means of a little weight fastened to the "drum-head" attached vertically to the bird's back, any change in the velocity of the flight produces a jerk, which shows its amount; and, lastly, the same "drum-head" being attached horizontally, each rise or fall of the bird is indicated. Besides this mechanical apparatus an electrical one was also used, so as to signal each stroke of the wing and its duration. From a number of experiments M. Marey arrives at these conclusions:—(1) that the down-stroke lasts longer than the up-stroke: (2) that the axis of the wing moves, relatively to the bird (a Buzzard flying almost horizontally), from the beginning of the down-stroke, nearly vertically downwards, then slightly forwards, then downwards again, and more and more backwards; while during the up-stroke it moves at first backwards, but towards the end forwards again into its original position: (3) that the wing at the beginning of the stroke, partly from the arrangement of the muscles, and partly from the resistance of the air, turns rapidly about its axis; and whereas before the beginning of the down-stroke it slopes forwards and upwards, the direction during the greater part of it is forwards and downwards; towards the end of the down-stroke it turns back again, and at the end is nearly horizontal, while during the up-stroke the wing slopes greatly forwards and upwards: hence it appears that, during the down-stroke, the bird receives an impetus for-

wards and upwards, while during the reverse movement the position of its wings tends somewhat to arrest its progress; but as it still slides upwards, what is lost in speed is gained in elevation.

M. Marey makes some comparisons between the flight of large and of small birds, and shows that, on the whole, the work done *per* stroke is proportional to the bird's weight; but, with due deference to him, he appears to overlook the fact that, as the stroke of the larger bird takes a longer time, the actual work done during any given time is less, and, unless the smaller bird has a very great surplus of strength (which there is no reason to think), a similarly-built bird of above a certain weight would be unable to fly at all—soaring, which is chiefly dependent on other causes, being left out of the question. The only escape from this difficulty seems to be in the supposition that the tip of the wing of the larger bird strikes the air with a velocity absolutely greater than that of the smaller one, in which case a moderate increase of velocity in proportion to the weight would suffice, as the resistance of the air is here nearly proportional to the square of the velocity.

In a prior course of papers M. Marey had elucidated the flight of insects, which, though mechanically simpler, presented great difficulties, from the small size of the subjects of his experiments; and the whole undoubtedly forms the most important contribution to our knowledge of the subject of flight that, with the exception of the standard work of Precht*, has ever been made.

3. DUTCH.

As our readers must by this time be able to judge for themselves of the merits of Mr. Keulemans as an ornithological artist, it would seem somewhat presumptuous for us to say much of the plates which decorate his work † written for the bird-loving public of his own nation, whether scientific or not.

* Untersuchungen über den Flug der Vögel. Wien: 1846.

† Onze Vogels in Huis en Tuin, beschreven en afgebeeld door J. G. KEULEMANS, Adsisistent aan 's Rijks Museum van Natuurlijke Historie. Deel i. Leyden: 1869. Roy. 8vo.

It contains seventy plates, representing nearly as many species of well-known birds, indigenous, migratory, or introduced, with from two to four pages of popularly-written letterpress on each ; but, unlike most of the popular works on natural history which the press of our own country too often produces, this book is comparatively free from the absurd blunders to which the common literary hack of the English publisher is so exceedingly prone. The errors we have found in it are generally of a venial sort, and none are such as to require correction at our hands. If we were forced to criticise Mr. Keulemans's drawings, we should say that he was less happy in delineating the aspect of the sprightly *Passeres* than that of other groups. None but an attentive observer of live birds can fully appreciate the truth of a remark made long ago in this Journal by Mr. Wallace (*Ibis*, 1864, p. 41), that the apparently trifling characteristics of peculiar attitudes and actions are often most significant in revealing the true affinities of various groups of Birds ; and the vivacity, or (as Prof. Lilljeborg, we suppose, would say) the irritability* of the Passerine order is indeed a stumbling-block to many a draughtsman who succeeds well enough with the generally more staid Picarians, Accipitrines, and so forth—birds which, however rapid may be their actions when searching for food, yet, when perched, are wont to stand at “attention” like well-drilled soldiers, or at most to indulge in the mechanical motions of puppets on wires. Our readers must not, however, imagine that we wish them to infer that all Mr. Keulemans's drawings of *Passeres* are wanting in spirit ; there is the onslaught of three Fire-crested Wrens upon the relatively huge caterpillar of a *Sphinx*, which is as lively as any one could desire. The colouring of the plates is generally good, but in some overdone—as in those representing the Siskin and Partridge, for instance. Being a patriotic Hollander, the author of course includes the portrait of a Stork, and in this, we think, he has been most happy : the attitude of the figure, the outlines of the bill, the partly contracted toes of the poised foot, are all as true to nature as is the comically-grave expression of the bird's countenance.

* Cf. Proc. Zool. Soc. 1866, p. 7.

Heer J. P. van Wickevoort Crommelin continues in the 'Archives Néerlandaises' his series of careful papers on the ornithology of the Low Countries. Two of these, published during the past year, are now, by his kindness, before us. The first, headed 'Notes ornithologiques sur la Faune des Pays-Bas,' in commenting on the works of Prof. Schlegel (*cf.* Ibis, 1859, p. 460) and HH. Bemmelen and Albarda*, contains some remarks on the nomenclature of various European species, which is in such a tangled state as really to form a *dignus vindice nodus*. The second, equally interspersed with the same kind of criticism, is entitled 'Remarques sur la Faune Ornithologique de la Hollande,' and consists of observations made in that country, which may be regarded as supplementary to those of Baron Droste in his work lately noticed by us (*antea*, p. 128). Each paper displays as much erudition as careful observation on the part of the author; but acceptable as they are to ornithologists, it does not seem to us that any of the facts recorded require especial mention here. We must, however, protest against some of Herr Crommelin's views of scientific nomenclature, and in particular against the importance which he attaches to what he regards as "genera" established by Gesner and Willughby, and in the 'Vorstellung der Vögel Deutschlands' of J. L. and J. C. Frisch. Those authors had plainly, as may be seen by consulting their works, no idea of any thing like a scientific "nomenclature," such as was founded by Linnæus: they of course called the birds they figured and described by names, as all writers in all ages have done, and they used for those birds Latin and French as well as German or English names; but the first are simply translations of the vernacular, and their adoption puts an end to the beautiful method, no less philosophical than practical, invented by Linnæus. There may be some reason for biologists to hesitate as to the particular edition of the great Swede's works they should take for their starting-point; but surely all will allow that priority has its limits as well as its rights, and in this matter the "ancients" are *ultra fines reipublicæ*.

* Boustoffen voor eene Fauna van Nederland, ii., iii.

4. GERMAN.

A paper by the late Professor van der Hoeven, written in 1866, and published the following year, only reached us within the last twelve months*. It contains a description and figure of the skeleton of *Dromas ardeola*, a form respecting the true affinities of which widely differing opinions have at various times obtained among systematists; and a good abstract of these opinions is prefixed by the author to his essay. From the osteology it is made plain that the place of the bird is next to the genus *Hæmatopus*; and we cannot help adverting to the fact that, on the same grounds, Mr. Edward Newton, some years ago (*Ibis*, 1867. p. 351), regarded it as a Plover—an idea which seems to have originated with Temminck (*Rec. Nouv. de Pl. Col. livr. 65*), and was afterwards adopted by Van der Hoeven, who in this his last publication has proved its truth. It should be remarked that Mr. Blyth, in urging as he did the separation of *Dromas* from either the Herons or the Storks (to which it had been formerly considered allied) and its affinity to the Terns (an assignment we cannot commend), did not so much wish to place it among the “Natatorial” birds as desire to show that the Terns and Gulls should not be severed from certain groups usually classed as “Grallatorial”—a view which, in our opinion, is unquestionably correct.

Two small treatises deserve some notice here on account of the pains bestowed upon them by their respective authors. One is by Herr Friedrich Cramer, on the Significance and Development of the Egg in Birds, which is published in the ‘*Verhandlungen*’ of the Würzburg Physico-Medical Society (New series, vol. i.); but, like the majority of such papers, it throws little light on matters of classification. The other, published in the well-known ‘*Archiv*’ of Professors Reichert and Du Bois-Reymond, for 1868, is by Dr. Hugo Magnus of Breslau, and gives an account of his Physiologico-Anatomical Inquiries into

* *Annotationes de Dromade ardeola*, Payk. Scripsit J. VAN DER HOEVEN. Dresdæ: 1867. 4to, pp. 16, and plate. (Separately printed from *Nov. Act. Acad. L.-C. Nat.-Cur.* vol. xxxiii. French translation in *Arch. Néerland.* 1868, pp. 281–295.)

the Breast-bone of Birds. This contains materials that may be made something of by systematists; but the author's researches so far do not seem to have led him to any very practical results. He considers that five distinct forms of sternum are found in the class, which is, if an obvious, certainly an arbitrary way of grouping their possessors, since it brings into the same category the *Gallinæ* and *Passeres*. We trust, however, that the author may continue his inquiries, and in particular not lay such great stress on the shape of the posterior extremity of the bone, which is often, even in members of the same natural family, so much modified as to show that it cannot be regarded as offering sure ground for classification (*cf.* Phil. Trans. 1869, p. 337, note); but on this subject we hope before long to have something more to say for ourselves.

In the last volume of 'The Ibis' (p. 113) we gave an account of Herr von Pelzeln's very important work*, and of the circumstances under which it was undertaken. The third part, which is now before us, continues and completes the catalogue of the birds collected by Natterer, and the description of the new species. Commencing with the *Conirotres*, it passes on to the *Scansores*, and concludes with the *Columbæ*, *Gallinæ*, *Grallæ*, and *Anseres*. Nineteen species of these groups are described as new, among which are two Tanagers (*Euphonia ochrascens* and *Tachyphonus nattereri*), four species of *Picumnus*, and two of *Crax*. After the conclusion of the general list, the author gives us a most interesting essay upon the ornithic fauna of Brazil, as exhibited by Natterer's discoveries. He begins by dividing South America ornithologically into four subregions, which are further shown in a map attached. These are:—

1. The *Columbian Subregion*, embracing Trinidad, Northern Venezuela, New Granada, and the western portions of Peru, Ecuador, and Bolivia.

2. The *Amazonian Subregion*, containing Guiana and the whole area drained by the Amazons and its affluents.

* Zur Ornithologie Brasiliens. Resultate von Johann Natterer's Reisen in den Jahren, 1817 bis 1835. Dargestellt von AUGUST VON PELZELN, III. Abtheilung. Wien: 1870.

3. The *South-Brazilian Subregion*, containing that part of Brazil lying south of the Amazons-valley and the adjoining countries on the left bank of the Paraguay, down to Uruguay and Monte Video.

4. The *Chileno-Patagonian Subregion*, containing Chili, La Plata, and Patagonia.

These views we believe to be very nearly correct; for, with some slight modifications, no more natural divisions could, we think, be made for that part of the neotropical region which lies south of the Isthmus of Panama. After this dissertation, Herr von Pelzeln points out at some length the most remarkable peculiarities of the portion of South America explored by Natterer, which extended into two only of the above-named Subregions, the Amazonian and the South-Brazilian. Both of these districts are rich in numerous and varied forms of the peculiar Neotropical families, *Formicariidæ*, *Tyrannidæ*, *Cotingidæ*, *Ramphastidæ*, *Cracidæ*, and *Tinamidæ*. The South-Brazilian Subfauna is especially characterized by the abundance of *Furnariinæ*, *Synallaxinæ*, *Troglodytinæ*, *Fluvicolinæ*, *Spermophilinæ*, *Cyanospizinae*, and *Columbidæ*, while the Amazonian district, which is principally forest, shows greater richness in *Bucconinæ*, *Galbulinæ*, *Cærebinæ*, *Dendrocolaptinæ*, *Cotinginæ*, and other wood-loving groups. In order to show more clearly the differences between these two faunas, full lists are given of the species observed by Natterer in each of them, in parallel columns. In a third column is added a corresponding list of the species observed in that part of Brazil denominated by the author the Bolivio-Brazilian district (*cf.* Ibis, 1869, p. 115), which occupies an intermediate position between the two faunas. Herr von Pelzeln then reverts to the six principal subdivisions into which, as already explained in our former notice, he has divided the ground traversed by Natterer, and points out at full length their diversities and similarities. There were only five species of birds of which examples were collected by Natterer in each of these six subdivisions, while as many as twenty species were obtained in five out of the six. Complete lists are added of the species obtained by him in each of these districts; and the various faunas are carefully compared with one another. In the South-

Brazilian district, he collected 525 species, in the Central-Brazilian 312, in the Bolivio-Brazilian 456, in the Columbio-Brazilian 540, in the Guiano-Brazilian 182, and in the Lower-Amazonian 197. This valuable essay concludes the third part of the work, which will be completed by a fourth, now in the press, containing (we are glad to hear) a general index to the whole.

5. RUSSIAN.

Few, if any, of our readers ought to be unacquainted with the excellent work done now many years ago by Dr. von Middendorff during his arduous travels in the extreme north and far east of Siberia, though it is to be feared that their knowledge of the 'Sibirische Reise' may not be very deep. The strictly ornithological part of this voluminous work was issued in 1853, and of course it is not our intention here to revert to its contents; but in 1867 there appeared another volume, or portion of a volume, of the series, giving a general Review of the Natural History (in the widest sense of the term) of the inhospitable tracts visited by this intrepid traveller, and especially of the Animal World of Siberia*. This book reached us only in the course of the last twelvemonth, and we feel bound to mention it as including matters of very great interest. Since the author risked his life on those boundless wastes, several other devoted explorers have added much to our knowledge of their *ornis*, of which he is consequently enabled to give a far more complete account than if he had attempted the task in former years, dependent only on the labours of his predecessors and on his own personal investigations, though these were neither few nor unimportant.

The geographical range of the birds, among other Siberian animals, is treated at some length. Dr. von Middendorff divides and subdivides them (somewhat arbitrarily perhaps) into various groups, such as the "Circumpolar Fauna," composed of those species which he considers to be quite or nearly identical throughout the whole circumpolar tract, including as a sub-

* Dr. A. V. MIDDENDORFF'S *Sibirische Reise*, Band iv. Uebersicht der Natur Nord- und Ost-Sibiriens, Theil 2, erste Lieferung.—Die Thierwelt Sibiriens. St. Petersburg: 1867. 4to, pp. 785–1094.

division the "Hyperboreal Fauna," consisting of the species which penetrate furthest north; and outside this comes his "Siberian Circumboreal Fauna," in which the animals of the Barrens (*Tundras*) are separated from those of the Forests. As the work is not likely to be of very easy access to most of our readers, we here subjoin the author's lists of the species belonging to these divisions.

"HYPERBOREAL BIRDS" (pp. 965-967).

Charadrius pluvialis.	Calidris arenaria.	Mergulus alle.
— hiaticula.	Cygnus musicus.	Procellaria glacialis.
— squatarola.	Anser bernicla.	Lestris parasitica.
Streptilas interpres.	— hyperboreus.	— richardsoni.
Phalaropus rufescens.	Anas spectabilis.	Larus sabinii.
— cinereus.	— mollissima.	— eburneus.
Tringa canutus.	— glacialis.	— tridactylus.
— maritima.	Uria grylle.	— leucopterus.
— cinclus.	— bruennichi.	— glaucus.
Lagopus alpinus.	Falco islandicus.	Corvus corax.
Plectrophanes nivalis.	Strix nyctea.	

"CIRCUMBOREAL BIRDS"—Barrens (p. 988).

Charadrius morinellus.	Anas stelleri.	Phalacrocorax carbo.
Tringa subarquata.	Colymbus glacialis.	Lestris pomarina.
Cygnus bewicki.	— arcticus.	Larus argentatus.
Anser albifrons.	— septentrionalis.	Sterna arctica.
— temmincki.	Uria troile.	
— leucopsis.	Alca torda.	
Lagopus albus.	Alauda alpestris.	Aquila albicilla.
Plectrophanes lapponica.	Hirundo riparia.	

—Forests (pp. 1007-1009).

Anas fusca.	Anas strepera.	Mergus merganser.
— histrionica.	— penelope.	— serrator.
— boschas.	— crecca.	— albellus.
— acuta.	— clypeata.	Podiceps cornutus.
Lagopus albus.	Bombycilla garrula.	Strix cinerea.
Fringilla linaria.	Pica caudata.	— brachyotus.
Loxia leucoptera.	Hirundo rustica.	— funerea.
— curvirostra.	Falco peregrinus.	
Corythus enucleator.	Buteo lagopus.	

It will be readily seen that the information given by our author bears materially on the question (which has been more than once mooted) of the advisability of recognizing a circum-

polar "Province"* or "Region" among the principal zoogeographical divisions of the earth's surface; nevertheless no naturalist who has not some special knowledge of ornithology will be able to avail himself of it in generalizations without great risk of error; for Dr. von Middendorff takes (as do most of the Russian zoologists) very decidedly what are called "lumping" views of species, and many of our friends, without any tendency to exaggerated "splitting," will demur to *Hirundo horreorum* being regarded as identical with *H. rustica*, and *Pica hudsonica* with *P. caudata*, and so forth. The comparison, which follows (pp. 1015-1017), of Alpine species with those of the High North is in the same strain; but here there is less danger of going astray.

Referring (p. 802) to the dwarfish examples of some birds on which distinct species have been founded, as for instance *Tringa schinzi*, Dr. von Middendorff asserts what we have heard announced before as probable†, namely, that of almost every high-northern species he finds a larger and a smaller race, the existence of which latter he explains by the fact that the young of late broods seldom attain the full size of their parents, their growth being arrested by the severe weather of early autumn, and the increasing scarcity of food at that season. He further declares, and the statement is of some value, that individuals of the smaller race usually interbreed with each other, and seldom with the larger birds.

An interesting chapter is that on the progressive extension westward of the range of many eastern species (pp. 1052-1056), a fact we believe first noticed by Prof. Lilljeborg (Naumannia, 1852, ii. pp. 87-93), and among them *Carpodacus erythrinus* (cf. Ibis, 1869, p. 226); but it is especially worthy of note that the list of these invading species contains so many of those which have of late been recorded as occurring in Western Europe, or even the British Islands, such as *Turdus sibiricus*, *Emberiza pusilla*, *E. pityornis*, *E. rustica*, *Phylloscopus superciliosus* and *Lanius phaniceus*, to say nothing of those which have long been known as occasional visitors to our shores, as *Turdus*

* Cf. Huxley, P. Z. S. 1868, p. 315.

† Cf. Altum, J. f. O. 1866, pp. 107-111.

varius, *Loxia leucoptera*, *Nucifraga caryocatactes*, *Falco vespertinus*, *Anas rutila*, and *Sterna caspia*.

In another chapter (pp. 829–909) great stress is laid on human agency in causing alterations in the fauna of a newly-settled country, both indirectly, from the birds following in the track of the agriculturist, who gradually forces out the hunter—and of this the spreading of *Passer domesticus* (pp. 896, 897) is a good example,—and directly, as has been the case of *Gypsetus barbatus* (p. 851), now quite extirpated in the Transbaikalian mountains, where a few years ago it was not uncommon.

We have thought it worth while to devote more than ordinary space to this important work, almost every page of which shows the varied literary attainments of the author, though it is very much to be regretted that many of the newer publications, which would have thrown much light on the different subjects treated, have been altogether overlooked, or, if mentioned at all, only quoted apparently at second-hand. Our strong wish, as we lay down the book, is, Would that a publisher could be found to give us an English translation!

6. AMERICAN.

We must congratulate Mr. Elliot on the completion of his great illustrated work * in continuation of that of Audubon, and now fitly dedicated to the memory of Alexander Wilson. Since we last noticed it (*Ibis*, 1868, pp. 345, 346) six Parts (two of them being conjoined) have appeared. The species figured are as follows:—

Part X. (1868):—*Meleagris mexicana*, *Chrysomitris lawrencii*, *Harporhynchus cinereus*, *Leucosticte griseonucha*, *Æstrelata* (lege *Æstrelata*) *hæsitata*, and *Priofinus cinereus*.

Part XI. :—*Falco aurantius*, *Helminthophaga luciae*, *Ægiothus fuscescens*, *Heliopædica xantusi*, *Rissa kotzebuii*, and *R. nivea*.

Part XII. :—*Falco candicans*, *Passer domesticus*, *Micrathene whitneyi*, *Atthis heloisæ*, *Larus brachyrhynchus*, and *L. hutchinsi*.

Part XIII. (1869):—*Falco islandicus*, *Stellula calliope*, *Scops kennicotti*, *Haliplana discolor*, and *Scops flammeola*.

* The New, and Heretofore Unfigured Species of the Birds of North America. By DANIEL GIRAUD ELLIOT. New York: 1869. 2 vols. fol.

Parts XIV., XV.:—*Graculus cinnatus*, *G. perspicillatus*, *Chen caerulescens*, *Somateria v-nigrum*, *Sagmatorhina lathamii*, *Stercorarius catarrhactes*, and *Fratercula glacialis*.

Many of these plates are from Mr. Wolf's pencil, and some are very beautiful, in particular that of the Mexican Turkey, and those of the Cormorants. The occasional introduction of woodcuts with details of the head, wings, and feet forms a new and useful feature of the work. In his "Introduction" Mr. Elliot says some hard, but by no means undeserved, things of species-makers: the origin of some so-called species he attributes, and possibly with reason, to hybridization; but more, we think, are due to a process which, to coin a barbarous word, might perhaps be called *hyperbrehmization*!

The first volume of the newly-commenced 'Memoirs of the Boston Society of Natural History' (pp. 542-563) contains a valuable paper* by Prof. F. Sumichrast, who has long resided in the State of Vera Cruz, and paid great attention to its ornithology. His object is to show the vertical range of the native birds; while a list of the migratory species is also added, stating the altitudes reached by them during their winter sojourn in the country. A naturalist resident in a district like this is of course able to treat of the distribution of the species within its borders in a way that no traveller can possibly do; and the author has been at great pains to elucidate his subject, not only giving the general range of each species, but also mentioning instances where individuals have been found beyond its normal limits. He divides the country into three vertical zones:—

1. The Hot Region (*tierra caliente*), reaching from the sea-level to a height of about 600 mètres (2000 feet);

2. The Temperate Region (*tierra templada*), embracing the zone from 600 to 1500 mètres (2000 to 5000 feet); and,

3. The Alpine Region (*tierra fria*, he says, is too vague an appellation), extending from 1500 to 3500 mètres (5000 to 11,500 feet). The number of species especially mentioned (though reference is made to many others) is 175, all belonging

* An abstract is also printed in the 'Proceedings' of the same Society (xii. pp. 222-225).

to the *Passeres*—a fact which rather diminishes the value of the author's conclusions, important and interesting as his paper undoubtedly is. His divisions, too, seem somewhat arbitrary, and require more definition than he gives of their vegetable and other animal products, since these naturally have a very potent influence on the distribution of the birds.

Mr. O. Salvin has been kind enough to inform us that, in Guatemala, the zones which seem to him to form the most natural divisions in point of altitude are:—1. The Hot Region, extending from the sea to a height of about 4000 feet, wherein the characteristic vegetation is a mixed forest, the prominent trees being the Cieba, Mahogany, India-rubber, and (most conspicuous among Palms) the Coroso; Plantains also thrive best here: 2. A Temperate Region, from 4000 to 7000 or 8000 feet, forming the zone of Evergreen Oaks, which on the volcanoes attain a great size, and are mingled with forests of *Chiostemon*: 3. The real Alpine Region, lying above 8000 or 9000 feet, with upland Pines, *Vaccinieæ*, Lupins, and other true alpine plants. Considerable modifications of these figures are necessary for various parts of the country, the nature of the forests varying much, according to the amount of moisture deposited; but Mr. Salvin believes that these divisions best group together the species which have their *foci* in one or other of them.

Not much need be said of the author's notes on the species, except to remark that the general rule of the higher the latitude the lower the range of distribution seems to hold good here, the altitudes attained by birds in Vera Cruz being less than those at which the same species are found in Guatemala. Thus, in the former, *Turdus grayi* is believed not to reach a height of 1300 mètres (4000 feet), whereas in the latter it is very common 1000 feet higher. Again, *Icterus wagleri* in Guatemala is also common at 5000 feet, while in Vera Cruz it is assigned to the Hot Region—that is, not exceeding 2000 feet. But we may feel assured that it is not to altitude and latitude, or, in other words, to temperature alone, but also to the supply of food, that we must look in a great measure for the causes of the vertical range of species of birds. On the other hand, their horizontal distribution seems to be traceable to changes in the

contour of the land in times long past. But upon this subject we need not enter here; it is sufficient to say that we trust the author will continue his observations, and finally give us the results based upon all the species of birds found in the State. We ought also to add that this paper concludes with an interesting note on the provident habits of *Melanerpes formicivorus*, a subject to which we have before adverted (*Ibis*, 1868, pp. 116, 117); and an illustration of a store of acorns, supposed to have been laid up by this species, is given.

Though our last number contained an article of some length devoted to one of Mr. Lawrence's recent labours, we have no fewer than four more papers from his indefatigable pen to notice. The first of these, from the 'Proceedings' of the Philadelphia Academy, contains descriptions of seven new species of American birds from various localities, namely:—*Dendræca capitalis*, from Barbadoes,—the differentiation of which is an additional bit of evidence in favour of Prof. Baird's suspicion that each of the West-Indian islands "possessed a Golden Warbler peculiar to itself" (Rev. Am. B. p. 201); *Quiscalus fortirostris*, from the same island; *Tachyphonus atricapillus*, from Trinidad; *Thamnophilus virgatus*, from New Granada; *Rhynchocyclus marginatus*, from Panama; *Pipra* (?) *cinnamomea**, from the Upper Amazon; and *Harpagus fasciatus*, from Guatemala. In a note appended to this paper the author remarks on a statement made in 'The Ibis' for 1868 (p. 115, *not* 299, as printed) by Mr. Salvin's authority, that *Zonotrichia melanotus* was "possibly the same as *Hæmophila humeralis*, Cabanis," and dissents therefrom, as well he may; for Mr. Salvin has subsequently stated (*anteà*, p. 114) he by mistake wrote that name for *H. ruficauda*. Mr. Lawrence's remaining papers are from the 'Annals' of the New-York Lyceum, and consist of:—a "List of a Collection of Birds from Northern Yucatan," wherein are described two new species, *Contopus schotti* and *Zenaidura yucatanensis*, both obtained at Merida by Dr. A. Schott; then a "Cata-

* Apparently identical with the subsequently described *Neopipo rubicunda* of Messrs. Sclater and Salvin (P. Z. S. 1869, pp. 438, 439, pl. xxx. fig. 3), as these gentlemen remark.

logue of Birds from Puna Island" in the Gulf of Guayaquil, where, out of twenty-one species found, four are new, namely *Turdus reevii*, *Thryothorus superciliaris*, *Empidonax griseipectus* and *Contopus punensis*; and, lastly, "Characters of some New South-American Birds, with notes on other rare or little-known species." The new birds are named *Turdus hauxwelli*, *Ochthæca rufomarginatus*, *Mecocerculus uropygialis*, *Pogonotriccus plumbeiceps*, *Myiozetetes rufipennis*, *M. inornatus*, *Lesbia ortonii*, and *Accipiter nigroplumbeus*.

When, some months ago, Prof. Baird wrote (*Ibis*, 1869, p. 350) of "Mr. Robert Ridgway, a young ornithologist of much promise," he certainly did not overshoot the mark; for this gentleman has not been long in giving proof of his competency. To some "Notices of certain obscurely known species of American Birds," published in the Philadelphia 'Proceedings' for June last he prefixes some remarks we would gladly reproduce here, did space permit; for they display a most philosophical train of thought on the part of the writer; and we sincerely congratulate our ornithological brethren in America on the addition to their ranks of one who, in the field as in the study, cannot fail to attain a very high position. The remarks which call for this expression of opinion are on the hybrids* occurring between representative species in the tracts where their ranges overlap. Of this fact no less than *fourteen* instances between as many pairs of North-American species are named by Mr. Ridgway, who says that many others are known to him; and his general considerations on them are extremely interesting. The rest of the paper is of more special scope. The author treats first of the North-American Wood-Thrushes (the group *Hylocichla* of Prof. Baird), to which belong eight species; and next of the uniformly red species of *Pyranga*, of which he enumerates six forms—one, *P. cooperi*, being distinguished for the first time; lastly

* It must not be supposed, however, that we coincide in Mr. Ridgway's views. There seems rather a probability that some of these so-called "hybrids" exhibit the ancient and more generalized form of parent species, the members of which at the extreme limits of its range have become more widely differentiated.

comes a notice of the smaller *Quiscalis* of the United States, three in number—one, *Q. æneus*, being described as new. The whole paper shows a very great amount of care in its execution.

XX.—*Letters, Announcements, &c.*

THE following letters, addressed "To the Editor of 'The Ibis,'" have been received:—

South African Museum, Cape Town.
October 9th, 1869.

SIR,—Permit me, in your pages, to thank Dr. Malmgren for his letter (*Ibis*, 1869, pp. 229, 230), which has only just reached me, and to point out that, of the birds to which he has called the attention of your readers as occurring in *South Africa*, and omitted from my book, *Budytes flavus* was hinted at (*B. S. Afr.* p. 119) and has since been noted by me (*Ibis*, 1869, p. 73) as found near Cape Town; for, as I then stated, the specimen obtained seems to be identical with examples of the European species. As to *Caprimulgus europæus*, I had heard of it, but could not satisfy myself as to the truth of the report; now, however, I can include it in any subsequent edition, as occurring at Natal, on the authority mentioned by your learned correspondent. But for the rest I must demur to receiving them as "South-African"—that is to say, as found within my narrowed limit, until the latitude and longitude of the places where they have occurred are particularized—the first mentioned by Dr. Malmgren being clearly beyond my range. Wahlberg unfortunately invented names and limits for the countries he visited, which are very different from those which we dwellers in South Africa recognize. His "Caffreland" is not our Caffreland, and extends I know not whither—as far as, if not far beyond Lake N'gami! A specimen therefrom, labelled by him from "Caffreland," may really come from a place many degrees beyond my limit, and I cannot include such an one in my list. It was a great pity that Wahlberg should have adopted this plan of giving old names to new boundaries; for it is calculated to make "confusion worse confounded."

Yours, &c.,

E. L. LAYARD.
